MARYLAND DEPARTMENT OF TRANSPORTATION

2017 CUSTOMER SATISFACTION SURVEY REPORT

UNIVERSITY OF BALTIMORE
SCHAEFER CENTER FOR PUBLIC POLICY

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MARYLAND DEPARTMENT OF TRANSPORTATION

2017 CUSTOMER SATISFACTION SURVEY REPORT

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EXECUTIVE SUMMARY

From June 10 through July 31, the Schaefer Center for Public Policy at the University of Baltimore conducted a telephone survey of 857 Maryland residents age 18 and older to gauge their satisfaction with and opinions of Maryland Department of Transportation (MDOT) services across the state of Maryland. The results of the survey are summarized below and presented in detail in the body of the report.

- Most frequently used services are roads (93%), toll roads, bridges and tunnels (86%), motor vehicle services (82%), and the airport (80%).
- The majority of respondents (87%) were satisfied or very satisfied with services they had received from MDOT.
- Seventy-four percent (74%) of respondents who had used MDOT services by phone were satisfied or very satisfied with their experience.
- Of the individuals who used MDOT services online, 91% were either satisfied or very satisfied with their experiences.
- Of the MDOT services provided, the most important are: keeping the highway system safe (3.8), maintaining traffic with signs, signals, and passing and turn lanes (3.7), and plowing, salting, and sanding of snow covered roadways (3.7). (Services were ranking on a 4-point scale.)
- The majority of respondents (80%) rated the friendliness or courteousness of an MDOT employee they received services from as good or excellent.
- The majority of respondents (85%) rated the thoroughness and accuracy of the information or service that was provided to them by MDOT as good or excellent.
- More than half of respondents (65%) rated the timeliness or speed of the service provided to them by MDOT as good or excellent.
- The majority of respondents (84%) rated the cleanliness and upkeep of the MDOT facilities as good or excellent.
- Services that respondents felt MDOT was providing the best were plowing, salting, and sanding of snow covered roadways (4.13), maintaining traffic with signs, signals, and passing and turn lanes (4.12), keeping the highway system safe (3.99), building and maintaining roadside rest areas (3.98), providing emergency roadside assistance (3.98), and providing travel information (3.97).
- Of the eight MDOT priorities listed, safety and security of people using the transportation system (3.78) was rated the most important priority, followed by reducing congested travel conditions (3.70).

- In an open ended question, respondents mentioned road conditions (18%), mass transit (17%), other/miscellaneous (15%), the bus systems (13%), and traffic/congestion (13%) as areas of concern.
- Only 34% of individuals felt that the public has sufficient input into the way MDOT makes decisions about transportation issues.
- Overall, respondents were satisfied (59%) with the smoothness of state roads.
- Approximately one third of respondents (34%) said that Maryland roads were better than other nearby states roads, while 42% felt the roads in Maryland and other nearby states were about the same.
- The majority of the respondents (82%) were satisfied or very satisfied with their transportation options, while the remaining 18% were not very satisfied, not satisfied at all, or didn't know.

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INTRODUCTION

The Schaefer Center for Public Policy, in collaboration with the Maryland Department of Transportation (MDOT), conducted an external customer satisfaction survey of Maryland residents over 18 years of age. The purpose of this statewide telephone survey was to gauge general customer satisfaction with and opinions about MDOT operations across the state of Maryland.

The Schaefer Center completed 857 surveys with Maryland residents yielding a margin of sampling error of +/-3.5%. Prospective participants were drawn from a sample of random telephone numbers using a dual frame sampling approach, which included landline and cell phones. A more detailed description of the sampling frame can be found in the methodology section.

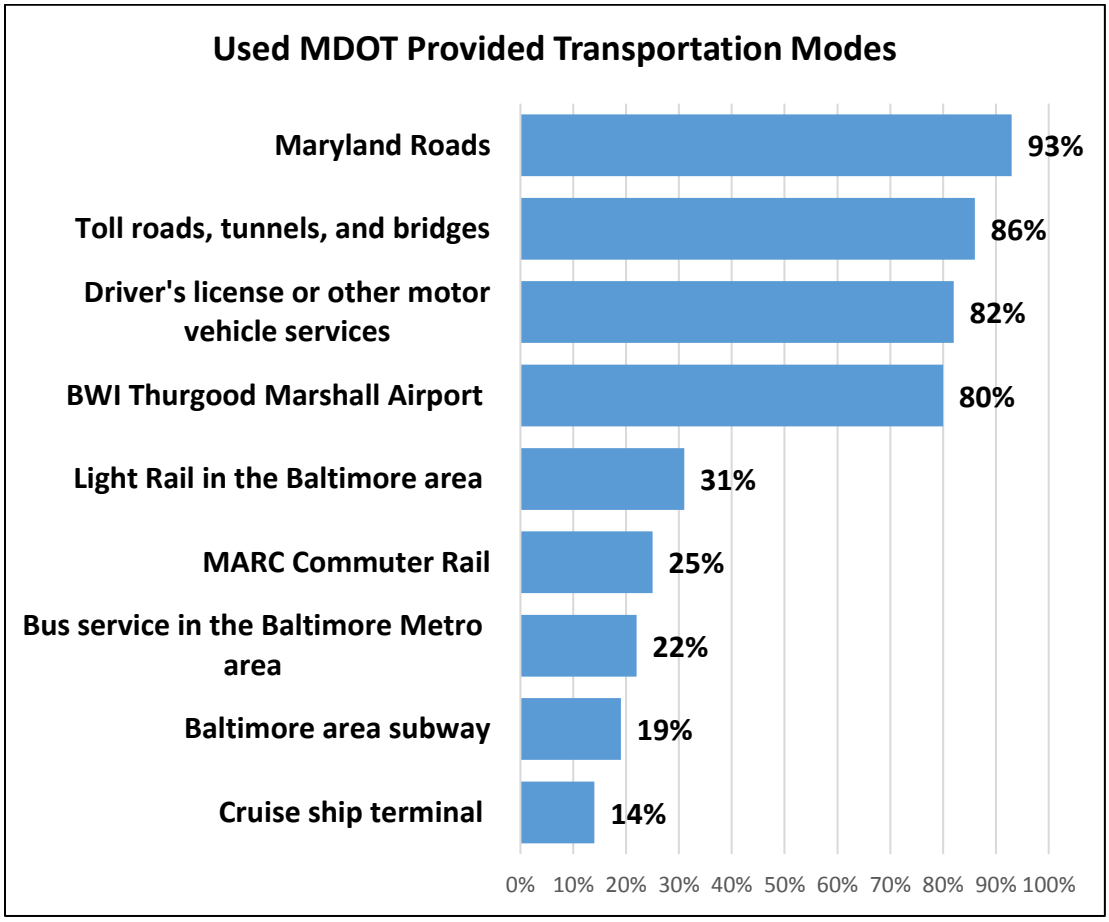
USE OF AND SATISFACTION WITH MDOT SERVICES

Question: *Have you used any of the following transportation services in Maryland?*

Respondents were asked about which MDOT transportation services they have used. The question only captures use and not regularity of use. Maryland roads were the most frequently used (93%) followed by toll roads, tunnels, and bridges (86%). A substantial majority also used driver's license and motor vehicle services (82%), as well as BWI airport (80%).

Usage drops off significantly for Baltimore Light Rail (31%), MARC (25%), Baltimore Metro bus service (22%) and the Baltimore subway (19%). These services are localized in the Baltimore Metro region. Only 14% report using the cruise ship terminal.

Figure 1: Used MDOTprovided transportation modes

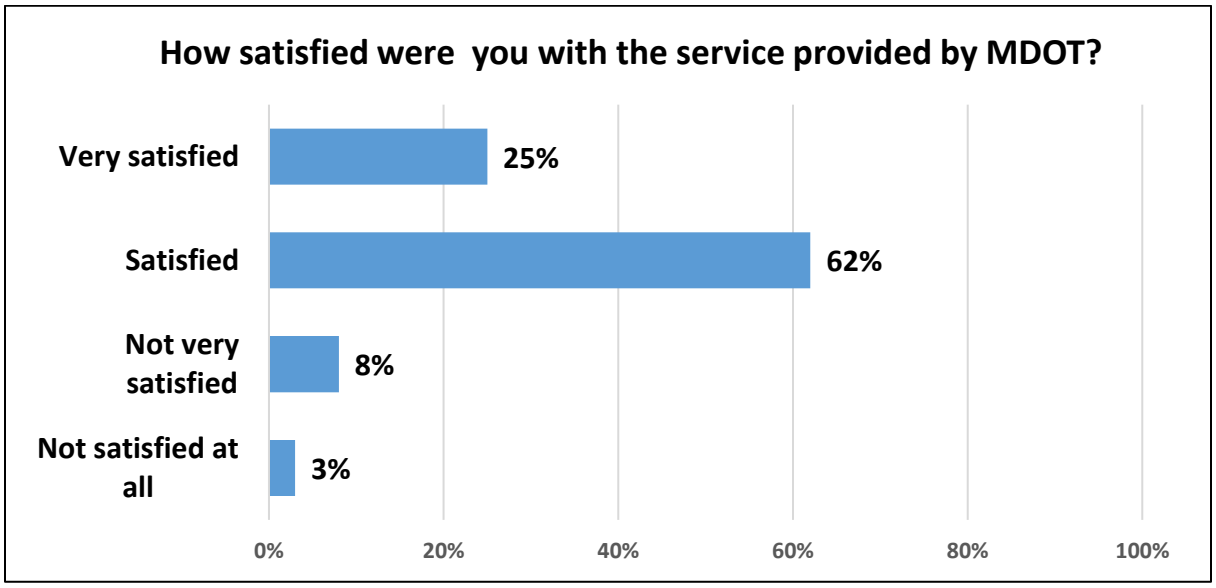


Satisfaction with Services

Question: *Considering the services I just asked you about, overall, how satisfied were you with the service provided by Maryland Department of Transportation? Would you say Very satisfied, Satisfied, Not very satisfied, or Not satisfied at all?*

Respondents were asked their level of satisfaction with services provided by the Maryland Department of Transportation. A substantial majority of respondents were satisfied or very satisfied (87%). Only a small percentage (11%) of respondents were not satisfied with MDOT services.

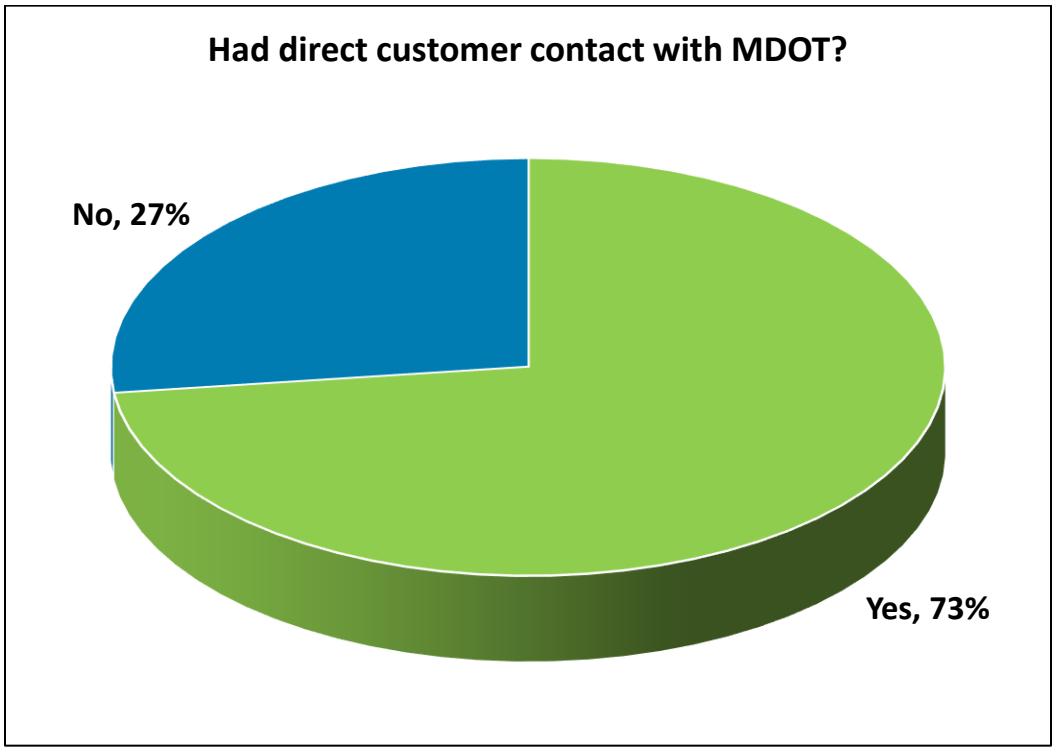
Figure 2: Satisfaction with MDOT services



Question: *Have you had any direct customer service interactions - such as a visit to Motor Vehicle Administration office, bus or rail stations attendant, or toll booth collector?*

Respondents were asked if they had any direct customer service interactions with MDOT. Almost three quarters of those responding (73%) said they had some direct customer service interactions while (27%) said they did not have any direct customer service interactions with MDOT.

Figure 3: Had direct contact with MDOT



Question: *Thinking about the last time you received a direct customer service:*

How would you rate the friendliness or courteousness of the MDOT employee who provided you service?

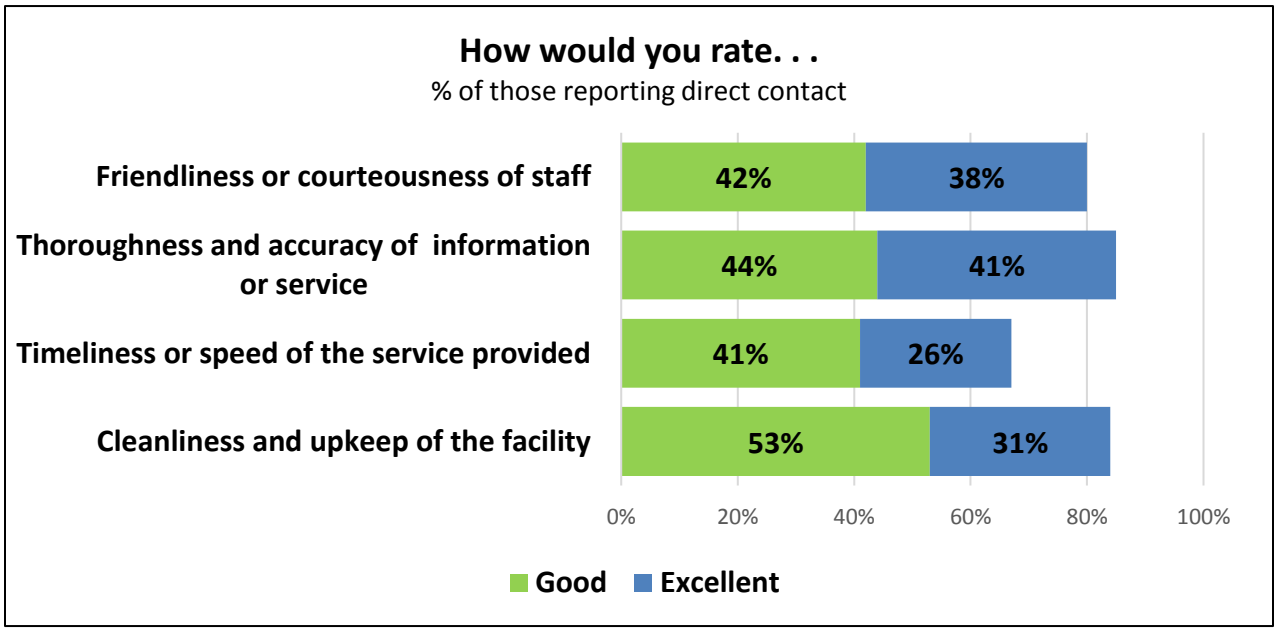
How would you rate the thoroughness and accuracy of the information or service provided to you?

How would you rate the timeliness or speed of the service provided to you?

How would you rate the cleanliness and overall upkeep of the facility?

Respondents were first asked to rate the friendliness or courteousness of MDOT employees who provided them service. Of those reporting a direct customer service interaction, the majority of respondents (80%) rated the friendliness or courteousness of an MDOT employee as good or excellent. Respondents were then asked to rate the thoroughness and accuracy of the information or service that was provided to them by MDOT. Again, the majority of respondents (85%) rated this as good or excellent. Next, respondents were asked to rate the timeliness or speed of the service provided to them by MDOT. More than half of respondents (65%) rated this as good or excellent. Last, respondents were asked to rate the cleanliness and overall upkeep of the facility that they received MDOT services at. The majority of respondents (84%) rated the cleanliness and upkeep of the facility as good or excellent.

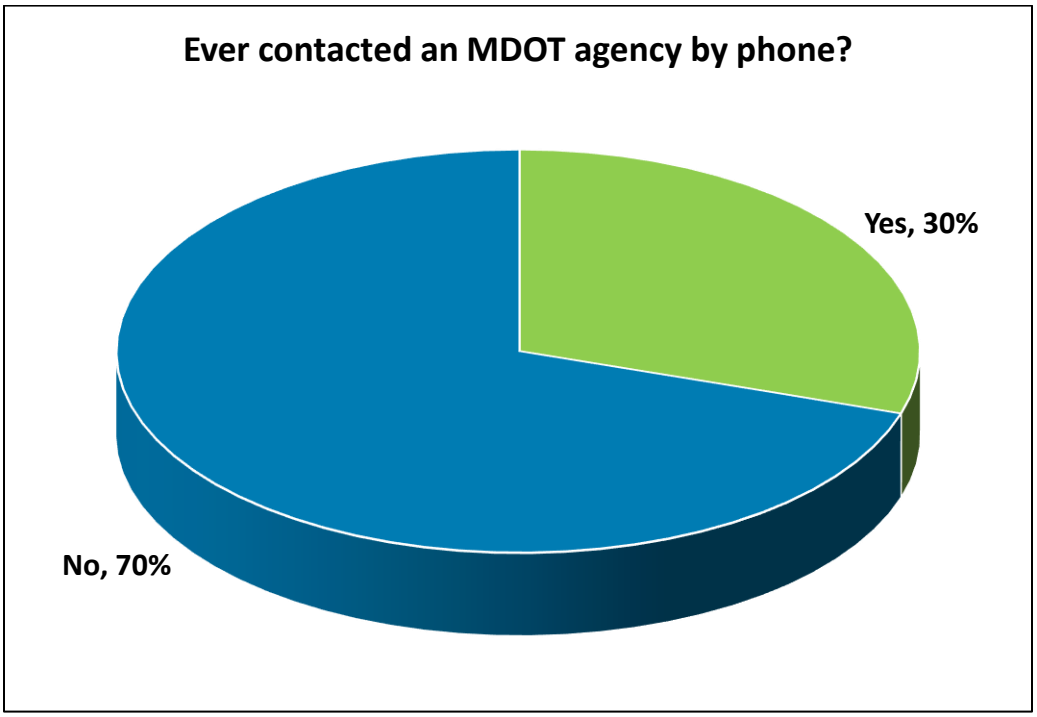
Figure 4: Rating of MDOT services



Question: *Have you ever contacted an MDOT agency by phone to obtain services such as VEIP vehicle emissions extensions, EZ Pass car changes, request for services or to report problems with roads (potholes), etc.?*

Respondents were asked if they had contacted any MDOT agency by phone for services. The majority of respondents (70%) said they had contacted MDOT by phone for services while 30% had not.

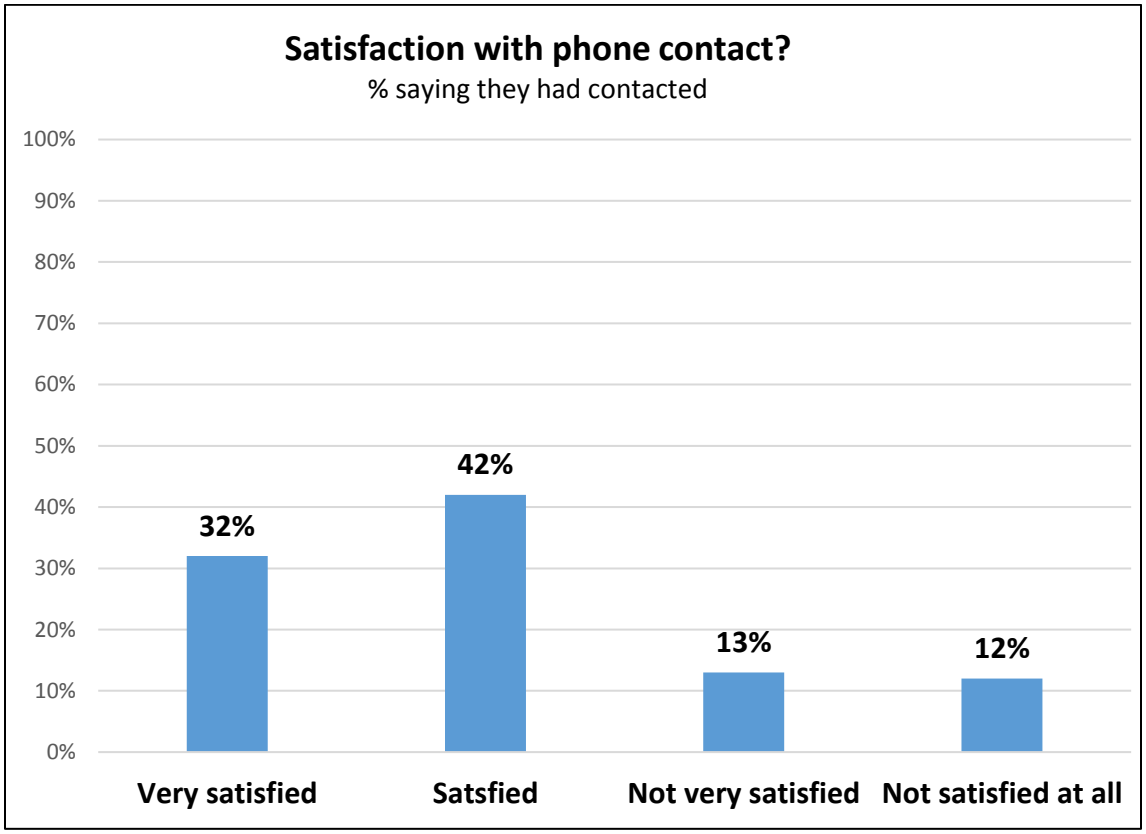
Figure 5: Contacted MDOT by phone



Question: *Thinking about the last time you received services over the phone, would you say you were very satisfied, satisfied, not very satisfied, or not satisfied at all?*

Respondents that had received MDOT services over the phone were asked to rate their level of satisfaction with the services they received. The majority (74%) said they were satisfied or very satisfied with the services received. A smaller percentage (25%) responded that they were not very satisfied, or not satisfied at all.

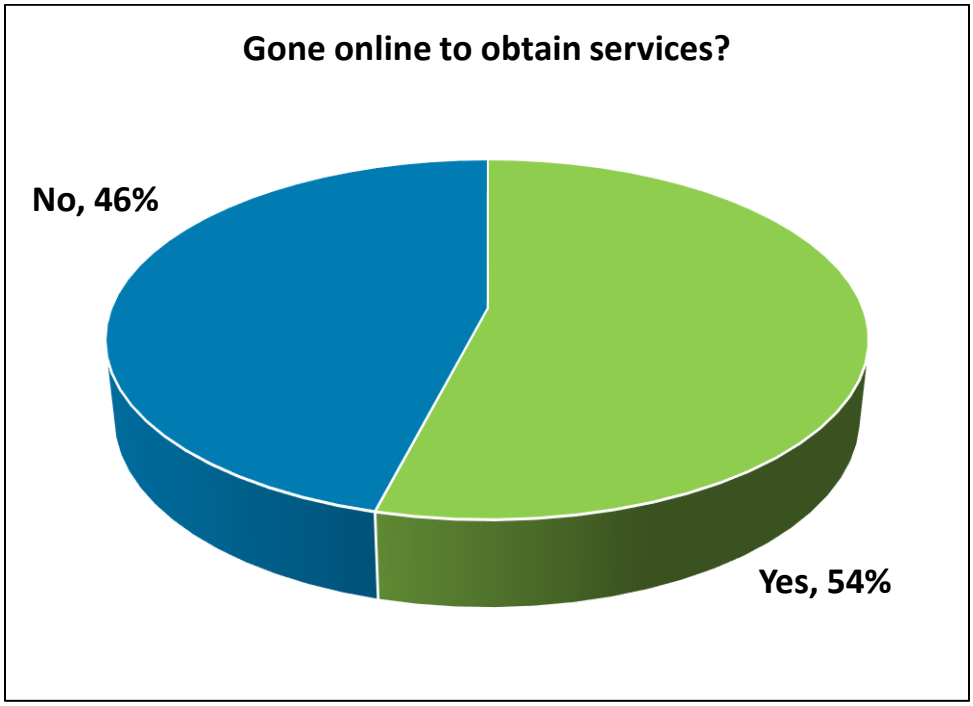
Figure 6: Satisfaction with phone contact



Question: *Have you ever gone online to obtain services from an MDOT agency, such as MVA driver and vehicle services, MTA Charm Card, payment of a bill, EZ Pass Account, MDOT's Maryland One System, or similar online services?*

Respondents were asked if they had ever obtained any services from an MDOT agency online. The results were split with 54% responding that they had obtained MDOT services online and 46% responding that they had not.

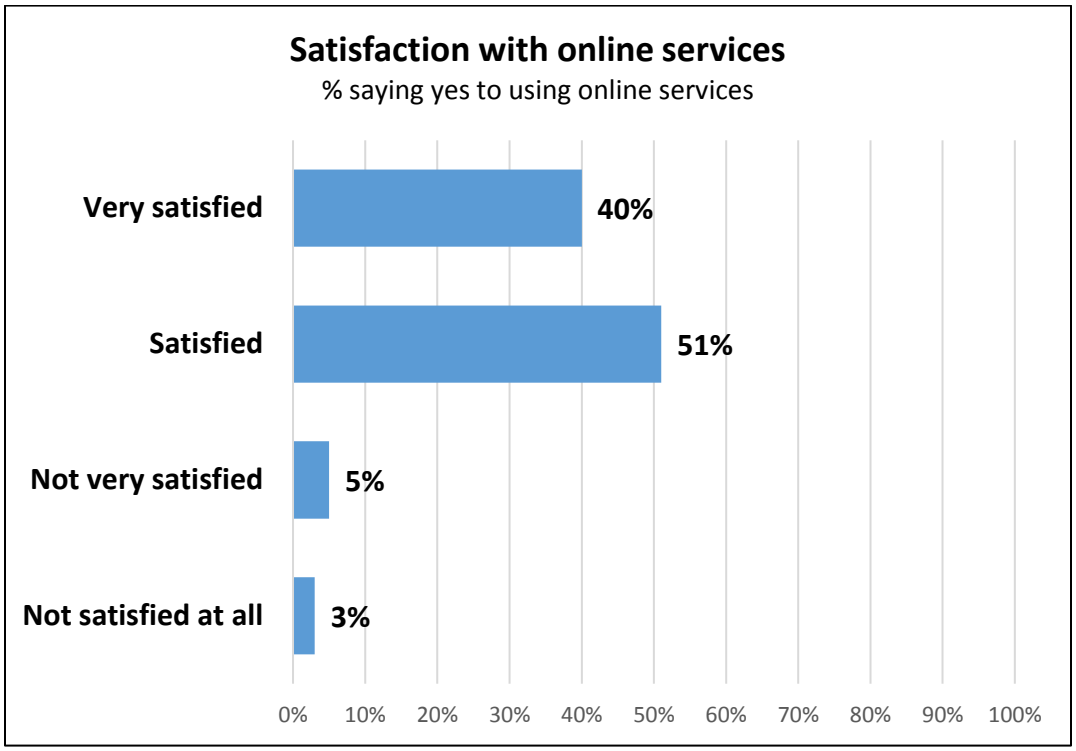
Figure 7: Obtain services online



Question: *Thinking about the last time you accessed services online, would you say you were very satisfied, satisfied, not very satisfied, or not satisfied at all?*

Individuals who responded yes to obtaining online services from an MDOT agency were then asked to rate their level of satisfaction with those services. The majority of respondents (91%) said they were satisfied or very satisfied with services obtained while 8% of respondents were not very satisfied or not satisfied at all.

Figure 8: Satisfaction with online services



IMPORTANCE AND RATING OF MDOT SERVICES

Question: *The next few questions refer to State owned roads and highways in Maryland. MDOT owns and maintains numbered roads outside Baltimore City that are not toll roads - such as US Route 50, Interstate Route 95, or Maryland Route 108. I'm now going to ask you about how well MDOT provides services on these roads.*

MDOT understands that some of its services may be more important than others.

For each of the following services, please tell me if it is extremely important, important, somewhat important, or not at all important to you.

Respondents were asked to rate the importance of different services that MDOT provides for state owned roads and highways in Maryland on a scale from 1-4. Keeping the highway system safe, maintaining traffic with signs, signals, passing, and turn lanes, and plowing, salting, and sanding of snow covered roadways were rated as most important withy average ratings of 3.80, 3.70, and 3.68, respectively.

The next highest rated services were building and maintaining roadways and bridges (3.59), protecting the environment during construction and maintenance (3.41), providing emergency roadside assistance (3.24), and building and maintaining roadside rest areas (3.11). The remaining services, providing travel information, providing pedestrian and bike facilities and accommodations, and providing roadside landscaping were all rated less than 3 on importance.

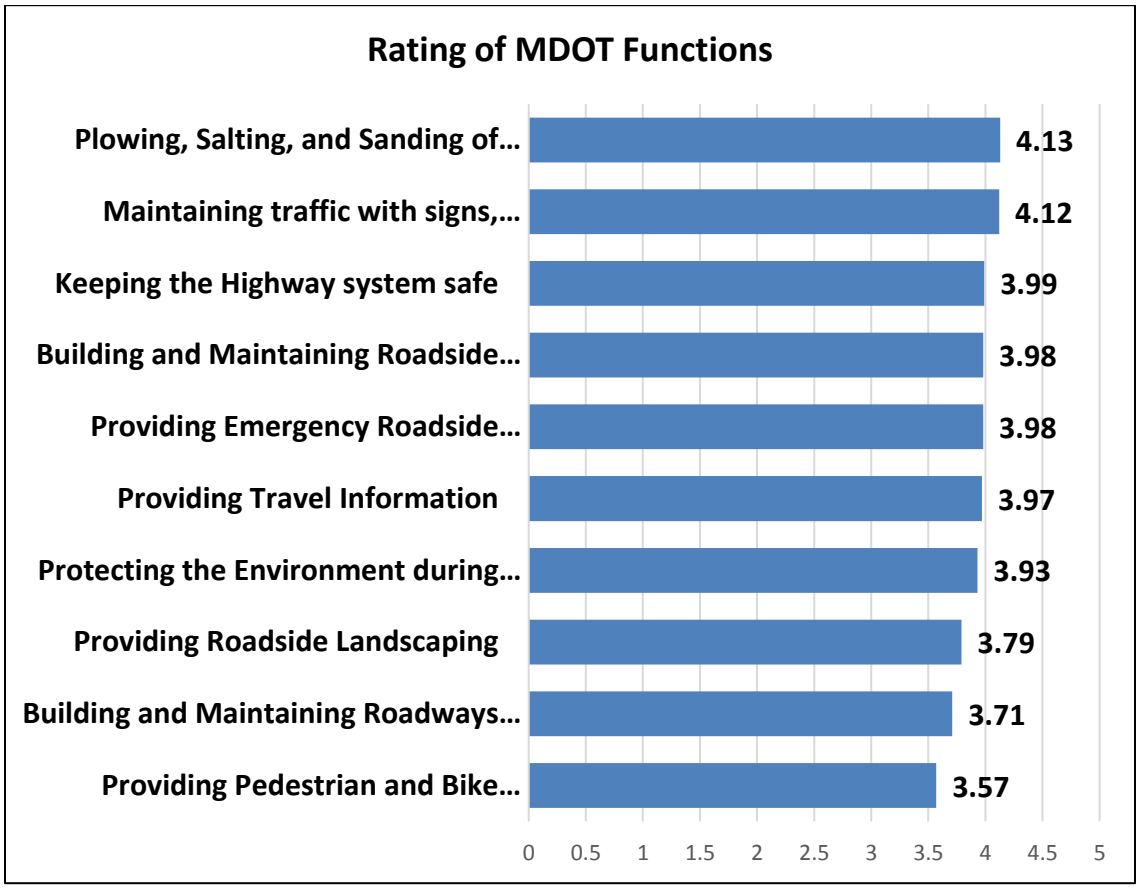
Figure 9: Importance of MDOT services

Question: *After this, I'll ask you how you would grade MDOT on how well MDOT is currently providing the service. For each service, please use an A to F scale where "A" means that you think MDOT is doing an excellent job and "F" means that you think MDOT is doing a very poor job.*

Respondents were asked to rate how well how MDOT is currently providing various services. Respondents rated each service using an A to F scale, with A meaning MDOT is providing excellent service and F meaning MDOT is providing very poor service. This scale was then converted into a numeric scale, with A being a 5 and F being a 1.

The services that respondents felt MDOT was providing the best were plowing, salting, and sanding of snow covered roadways (4.13), maintaining traffic with signs, signals, and passing and turn lanes (4.12), keeping the highway system safe (3.99), building and maintaining roadside rest areas (3.98), providing emergency roadside assistance (3.98), and providing travel information (3.97). The remaining services were rated slightly lower: protecting the environment during construction and maintenance activities (3.93), providing roadside landscaping (3.79), building and maintaining roadways and bridges (3.71), and providing pedestrian and bike facilities and accommodations (3.57).

Figure 10: Rating of MDOT functions



MDOT requested that the Schaefer Center develop an overall customer satisfaction measure for MDOT based on the MDOT Responsibilities/Functions displayed in the preceding graph. This replicates the procedure for the Customer Satisfaction Index (CSI) used by State Highway Administration from 2008 to 2014. The SHA index was based on a 24-item scale. The 2017 index is based on a 10-item scale.

Since respondents were asked to rate the importance of each of the 10 functions, these importance ratings are used to modify the actual grades respondents assigned to each function. In this manner, those functions that were most important to respondents had a greater impact on the calculation of satisfaction than those functions that were identified by respondents as being less important. We first calculated a factor for each of the MDOT functions, the Weighting Factor (WF), which was computed by dividing each function's Mean Importance Rating (MIR) by the sum of all 10 functions.

Table 1: Calculation of Weighting Factors for Satisfaction Index

MDOT function	Mean Importance Rating	Weighting Factor (WF)
Keeping the Highway System Safe	3.80	11.53%
Plowing, Salting, and Sanding of Snow-covered Roadways	3.68	11.16%
Building and Maintaining Roadways and Bridges	3.59	10.89%
Providing Emergency Roadside Assistance	3.24	9.83%
Protecting the Environment d\During Construction and Maintenance activities	3.41	10.34%
Providing Pedestrian and Bike Facilities and Accommodations	2.96	8.98%
Providing Roadside Landscaping	2.52	7.64%
Building and Maintaining Roadside Rest Areas	3.11	9.43%
Providing Travel Information	2.96	8.98%
Maintaining Traffic with Signs, Signals, and Lanes	3.07	11.22%
Sum of Means for weighting calculation	**32.97**	

The weighting factors were then used to modify the satisfaction ratings given for each MDOT function. The results of this calculation and the calculation of the overall CSI are displayed in Table 2.

Table 2: Calculation of Overall Satisfaction Index			
MDOT Function	**Mean Grade (MG)**	**Weighting Factor (WF)**	**Weighted Score WS= (WF*MG)**
Keeping the Highway system safe	3.99	0.1153	0.4599
Plowing, Salting, and Sanding of Snow-covered Roadways	4.13	0.1116	0.4610
Building and Maintaining Roadways and Bridges	3.71	0.1089	0.4040
Providing Emergency Roadside Assistance	3.98	0.0983	0.3911
Protecting the Environment during Construction and Maintenance activities	3.93	0.1034	0.4065
Providing Pedestrian and Bike Facilities and Accommodations	3.57	0.0898	0.3205
Providing Roadside Landscaping	3.79	0.0764	0.2897
Building and Maintaining Roadside Rest Areas	3.98	0.0943	0.3754
Providing Travel Information	3.97	0.0898	0.3564
Maintaining traffic with signs, signals, and passing and turn lanes	4.12	0.1122	0.4624
Overall Customer Satisfaction Index Score			**3.9268**

The 2017 Customer Satisfaction Survey yielded an MDOT CSI of 3.9268. Using these same calculations, previous SHA Customer Satisfaction Surveys yielded CSI scores of:

Table 3: Comparison of CSI Scores	
Year	**CSI**
2014	3.8748
2012	3.9199
2010	3.9375
2008	3.9050

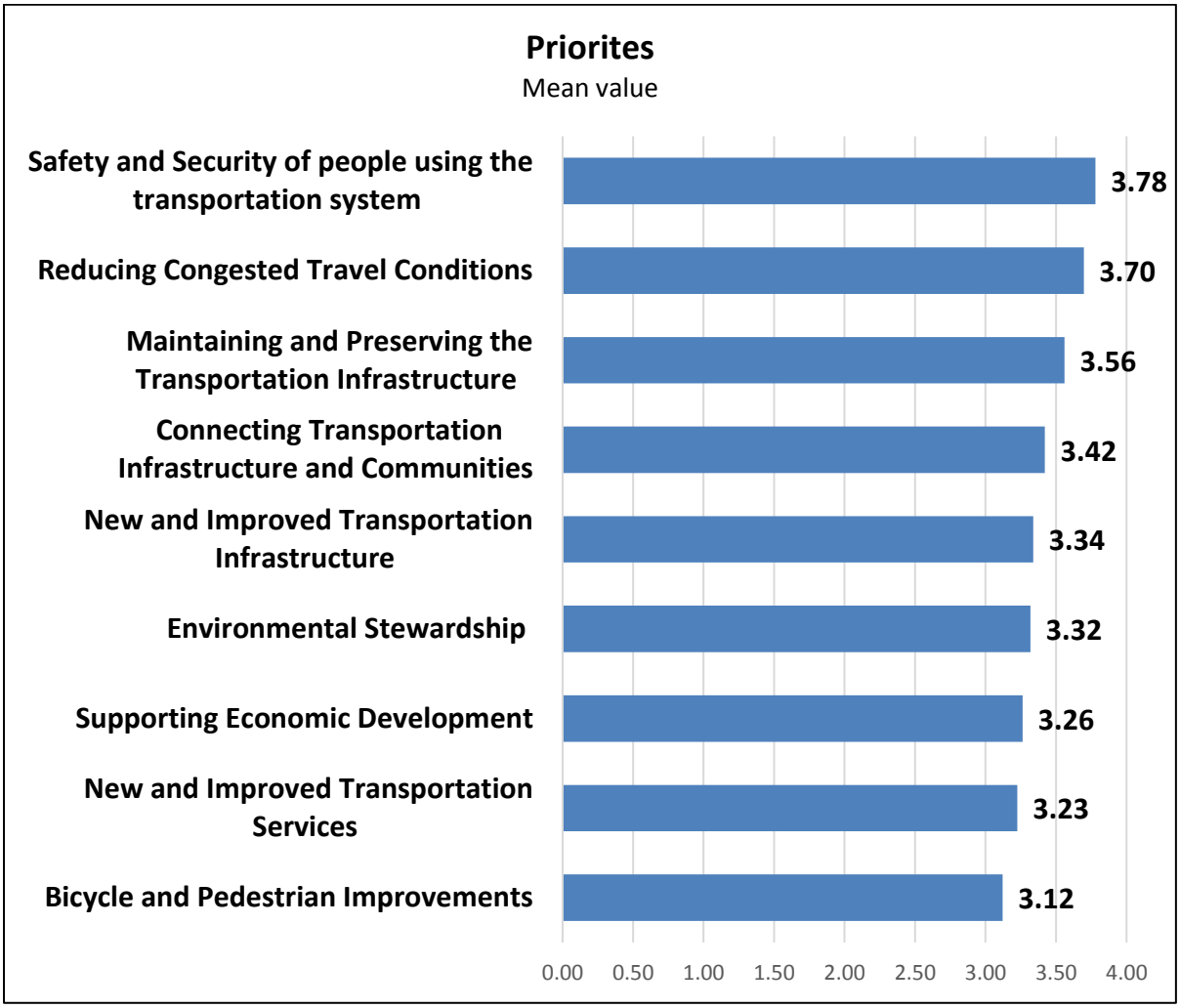
Index values for previous years are not directly comparable to the 2017 score. Previous years used the same 24-item scale, while this year's survey reduced the number of items to 10 and changed the wording and meaning of some items. In using the same methodology for 2017, the aim is to provide a similar view of MDOT highway services, weighted to the importance that Marylanders place on each service.

MARYLAND TRANSPORTATION PRIORITIES

Question: *I'm going to read a list of transportation priorities. Please tell me if each is extremely important, Important, Not very important, or not at all important.*

Respondents were asked to rate the importance of different transportation priorities. Of the eight priorities listed, safety and security of people using the transportation system (3.78) was rated the most important priority, followed by reducing congested travel conditions (3.70). The next priorities that respondents felt were important were maintaining and preserving the transportation infrastructure (3.56), connecting transportation infrastructure and communities (3.42), new and improved transportation infrastructure (3.34), and environmental stewardship (3.32). The least important priorities were supporting economic development (3.26) and new and improved transportation services (3.23).

Figure 11: MDOT priorities

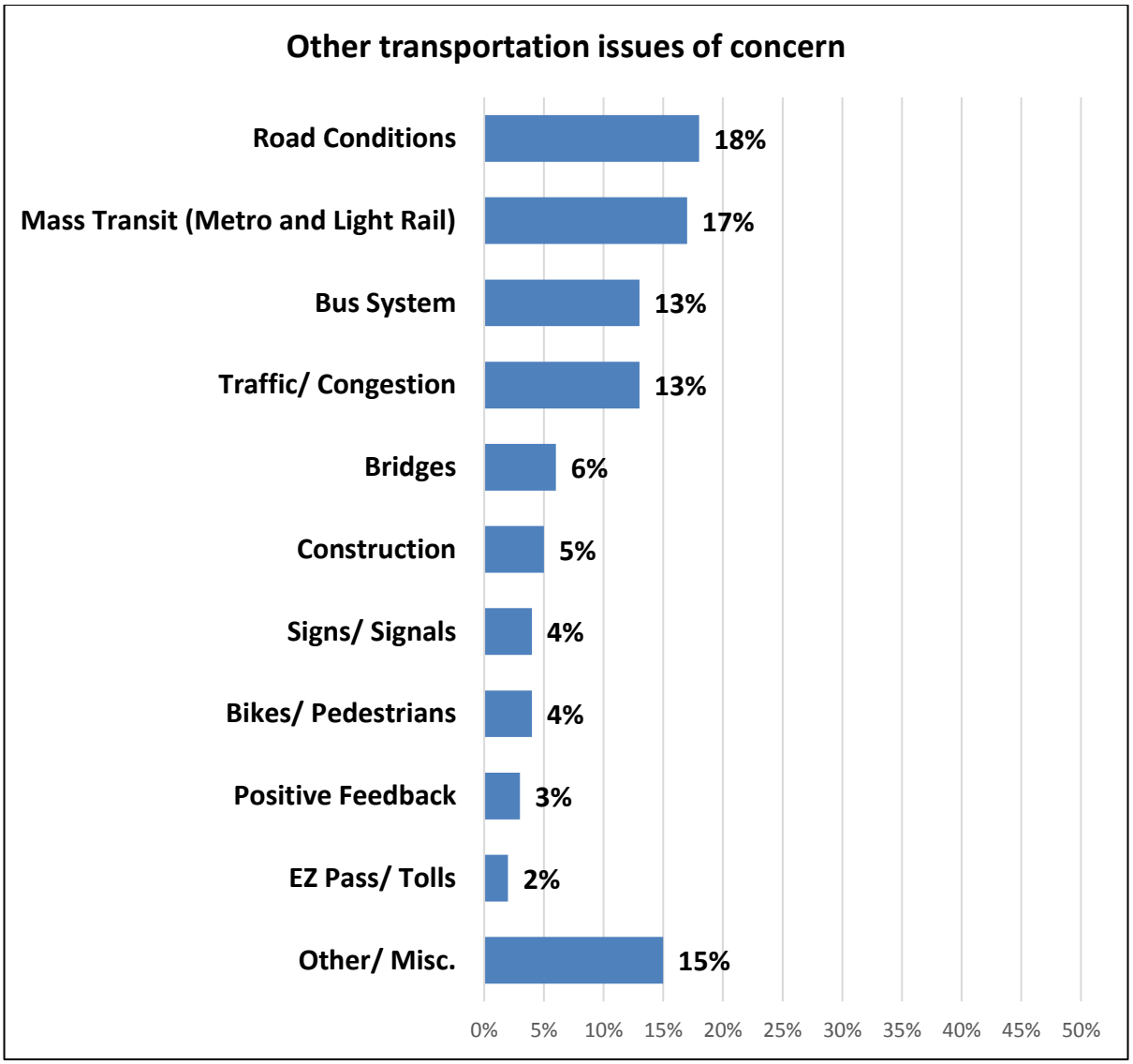


Question: *Are there other transportation issues that you are concerned about?*

This was an open-ended question allowing respondents to volunteer areas of concern.

Respondents were then asked if there were any other transportation issues that they were concerned about that were not previously mentioned. The most commonly stated issues were road conditions (18%), mass transit (17%), other/miscellaneous (15%), the bus systems (13%), and traffic/congestion (13%). The remaining 24% were made up of issues such as bridges, construction, signs/signals, bikes/pedestrians, positive feedback, and EZPass/tolls.

Figure 12: Other transportation issues of concern



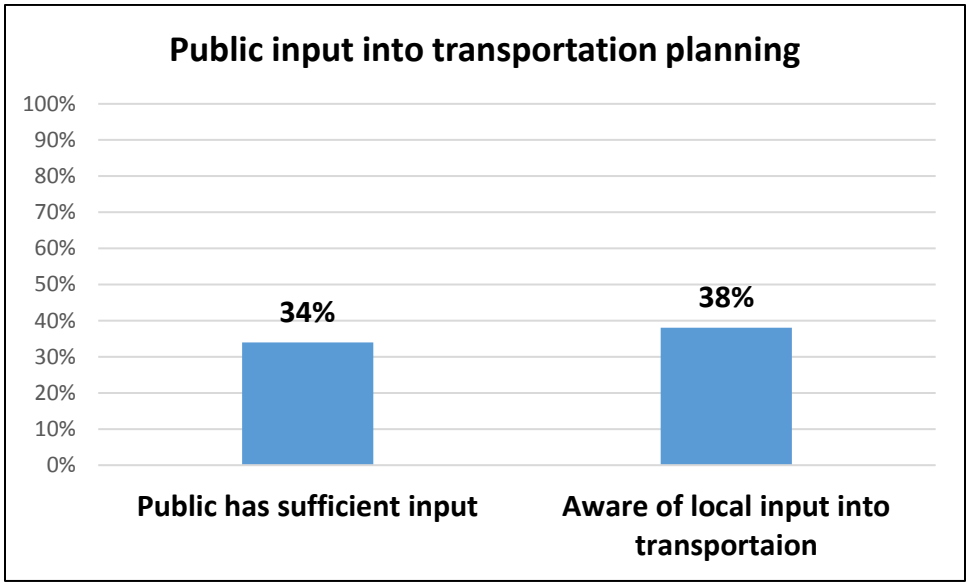
PUBLIC INPUT INTO TRANSPORTATION PLANNING

Question: *Do you believe the public has sufficient input into the way the Maryland Department of Transportation makes decisions about transportation issues?*

Question: *Before now, were you aware that local jurisdictions in Maryland have a say in state transportation planning?*

Respondents were asked if they felt the public had sufficient input into the way MDOT makes decisions about transportation issues. Only 34% of individuals felt that the public has sufficient input. Next, respondents were asked if they were previously aware of local jurisdictions in Maryland had a say in state transportation planning. Similarly, only 38% of respondents were previously aware of this.

Figure 13: Public input into MDOT planning

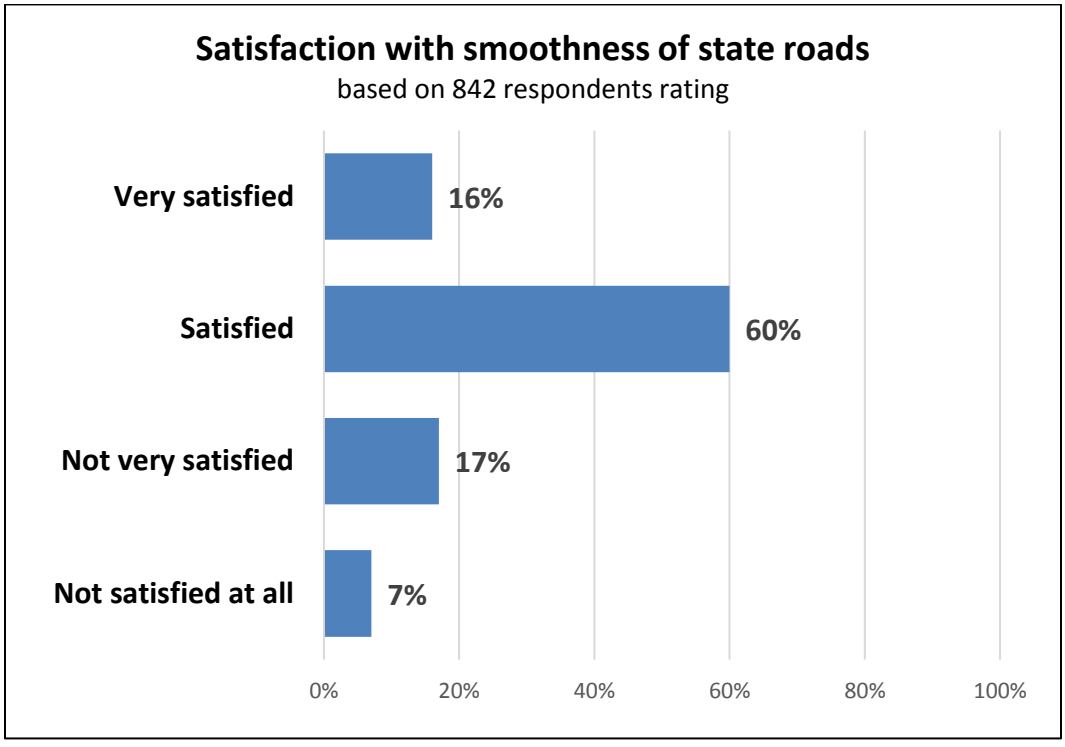


OVERALL EVALUATION OF MARYLAND ROADS

Question: *This question is also about MDOT roads - numbered roads outside Baltimore City that are not toll roads, such as US Route 50, Interstate Route 95, or Maryland Route 108. Overall, how satisfied are you with the smoothness of the roads that MDOT owns and maintains? Would you say Very satisfied, Satisfied, Not very satisfied, or Not satisfied at all?*

Respondents were asked their level of satisfaction with the overall smoothness of the roads that are owned and maintained by MDOT. Overall, respondents were satisfied with road smoothness: 76% said they were very satisfied or satisfied with road smoothness. The remaining 24 % was divided among not very satisfied (17%), not satisfied at all (7%).

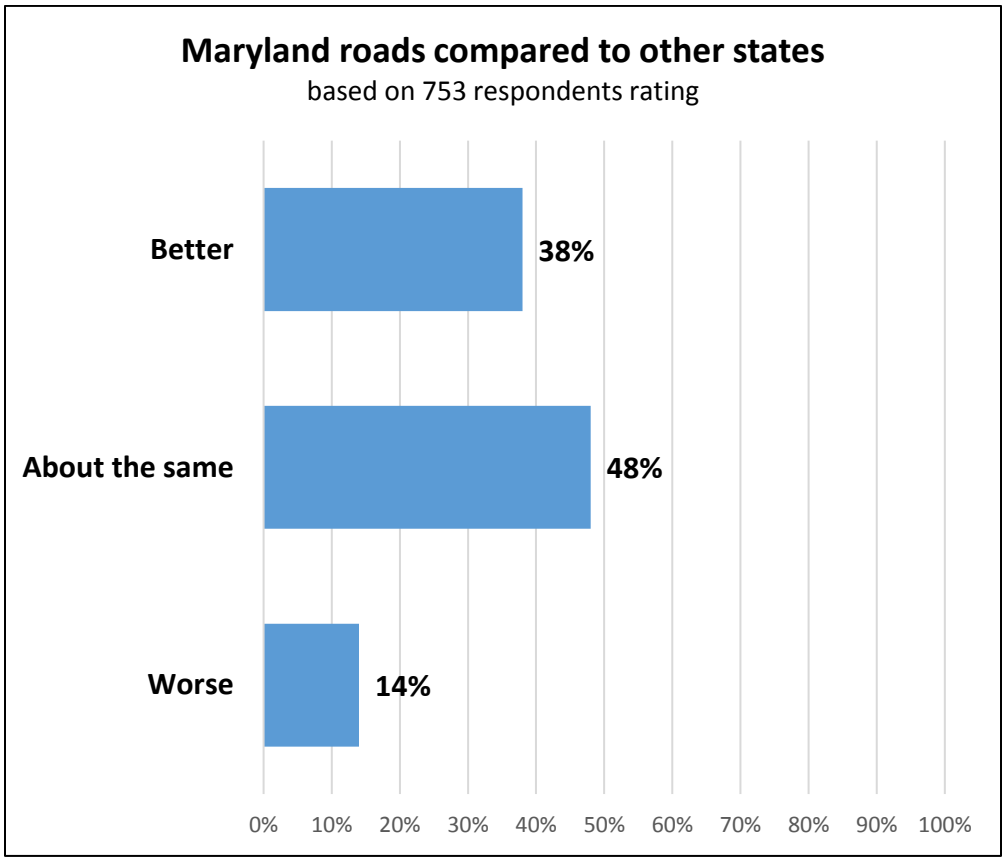
Figure 14: Satisfaction with smoothness of state roads



Question: *Compared to similar roads in nearby states, would you say that MDOT roads are…*

Respondents were asked to compare roads in Maryland to those in nearby states. Over one-third of respondents (38%) said that Maryland roads were better than other nearby states roads, while 48% felt the roads in Maryland and other nearby states were about the same. A small percentage (14%) said the roads in Maryland were worse in comparison to other states.

Figure 15: Maryland roads compared to other states

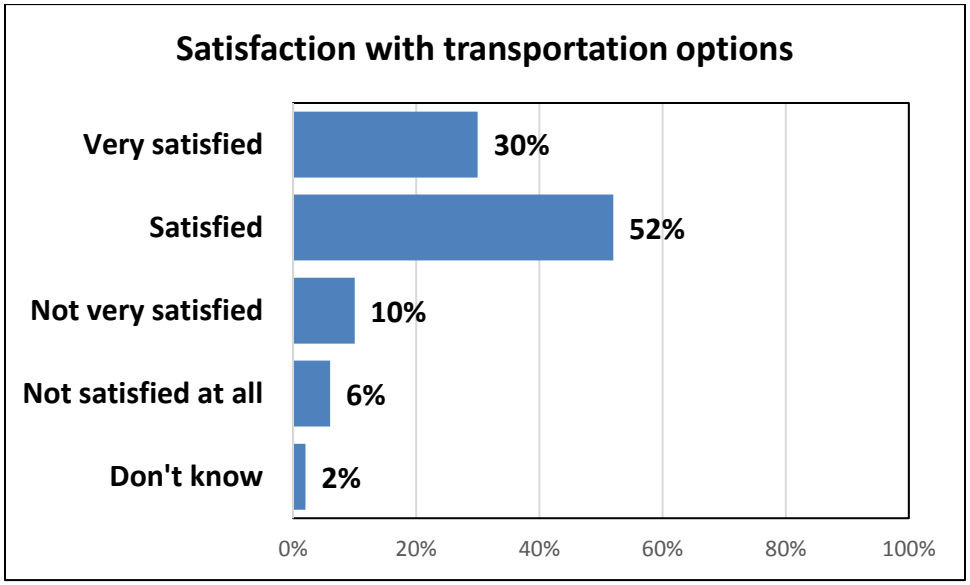


SATISFACTION WITH TRANSPORTATION OPTIONS

Question: When it comes to getting where you need to go, how satisfied are you with the range of options you have - such as roads, busses, trains, and other facilities or services?

Respondents were asked their satisfaction with the range of transportation options that were available to them. The majority of the respondents (82%) were satisfied or very satisfied with their transportation options, while the remaining 18% were not very satisfied, not satisfied at all, or didn't know.

Figure 16: Satisfaction with transportation options

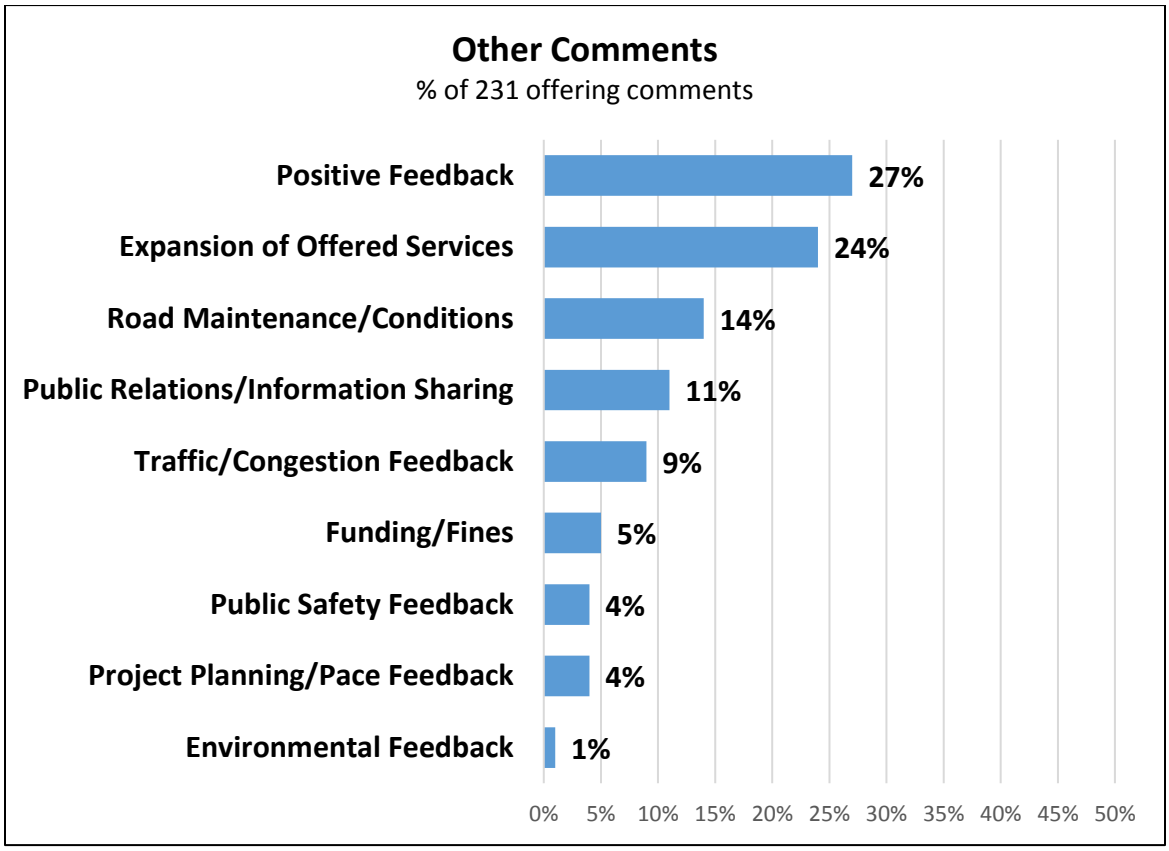


OTHER COMMENTS

Question: *Do you have any other comments you would like to provide regarding the performance of the Maryland Department of Transportation?*

Respondents were then asked if they had any further comments that they wanted to provide to MDOT. There were 231 responses to this question that were categorized based on content. Positive feedback was the most common comment (27%), followed closely by a request for expansion of offered services (24%). The remaining categories had relatively low percentages of responses: road and offered services (14%), public relations/information (11%), traffic/congestion feedback (9%), funding/fines (5%), public safety feedback (4%), project planning/pace feedback (4%), and environmental feedback (1%).

Figure 17: Other comments



DEMOGRAPHICS

Table 4 shows demographic breakdowns of the final weighted database. Data was weighted by county of residence in order to bring results more closely in line with statewide population distribution.

Table 4: Survey Demographics

Gender		MDOT District		Age	
Male	43%	District 1	4%	18-34	19%
Female	57%	District 2	4%	35-54	32%
		District 3	32%	55-74	39%
Licensed Driver		District 4	18%	75 and over	10%
		District 5	15%		
Yes	94%	District 6	4%		
		District 7	12%		
		Baltimore City	11%		

SURVEY PROJECT TIMELINE

This survey is a new survey for MDOT, and incorporates some of the items previously completed in the biennial SHA Customer Satisfaction Survey; however it adds many additional components designed to measure customer satisfaction/perception of MDOT as a whole and each TBU individually through questions tailored to the customer interactions of that TBU. The questions specific to SHA were part of the survey instrument designed and implemented in early 2006 and amended and implemented again in a similar form in 2008, 2010, 2012 and again in 2014. The non-SHA components were developed in 2017 in collaboration with MDOT personnel and reviewed by representatives of each TBU.

In May 2017 the final version of the survey was programmed by the Schaefer Center staff using Sawtooth Software's Sensus 4.2 Computer Assisted Telephone Interviewing (CATI) software and tested by the Schaefer Center CATI Lab staff. These tests were used to further refine the survey instrument and the CATI programming. Any issues with readability, skip patterns or survey flow were identified and corrected at this stage.

The CATI data collection took place at the Schaefer Center's CATI Lab between June 7, 2017 and August 9, 2017. Calls were made between 9:00 a.m. and 9:00 p.m. Monday through Saturday.

METHODOLOGY, WEIGHTING

The Schaefer Center completed a telephone survey of 857 Maryland residents yielding a margin of sampling error of approximately +/-3.5%.

Prospective participants were drawn from a sample of random telephone numbers using a dual frame sampling approach. Sample was obtained for landline phones as well as cell phones. This methodology is commonly called "dual-frame," since the overall sample is really a composite of two distinct samples, one landline and one cell phone. The sampling for the cell phone portion came from the same sample provider as the landline sample. The sample provider screened and coded the random sample to maximize the probability that the cell phones belong to residents of Maryland and that they are phones that are in use (as opposed to numbers that have been assigned to a cell phone provider but not activated or not used frequently by a consumer). The sample provider was able to rate the likelihood that each number would lead to an interview with a valid respondent on a 1 to 3 scale, allowing the Schaefer Center to manage the sample to maximize the likelihood of a cell phone attempt leading to a contact and ultimately to a completed interview.

Post-survey weighting to known population characteristics is used to correct samples that are not distributed in the correct proportions. Post-survey weighting was based on the differences between the proportion of the sample with the characteristic and the proportion of the population that also shares that characteristic.

A proportional weight was calculated to adjust the final results by county of residence. The final weights appear in the table on the next page.

Table 5: County Weighting Factors				
County	**Proportion Responses**	**Population Over 18**	**% of State Population**	**Weight Factor**
Allegany	1.4	59,435	1.27	0.91
Anne Arundel	10.7	441,036	9.45	0.88
Baltimore City	12.1	485,585	10.40	0.86
Baltimore County	16.1	651,524	13.96	0.87
Calvert	2.3	69,716	1.49	0.65
Caroline	0.8	25,130	0.54	0.67
Carroll	3.3	130,939	2.81	0.85
Cecil	2.8	78,902	1.69	0.60
Charles	2.6	119,540	2.56	0.98
Dorchester	0.9	25,387	0.54	0.60
Frederick	3.7	189,160	4.05	1.10
Garrett	0.4	23,834	0.51	1.28
Harford	6.2	194,550	4.17	0.67
Howard	5.5	239,193	5.12	0.93
Kent County	0	16,494	0.35	0.00
Montgomery	11.9	799,599	17.13	1.44
Prince George's	10.5	703,738	15.08	1.44
Queen Anne's	0.7	38,311	0.82	1.17
Saint Mary's	2.5	84,891	1.82	0.73
Somerset	0.7	21,468	0.46	0.66
Talbot	0.5	30,381	0.65	1.30
Washington	2	116,927	2.50	1.25
Wicomico	1.2	79,907	1.71	1.43
Worcester	1.1	42,389	0.91	0.83

CALCULATION OF RESPONSE, COOPERATION, AND REFUSAL RATES

Final disposition and outcome rates are based on the American Association for Public Opinion Research's (AAPOR) *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys*, and are in compliance with AAPOR's *Code of Professional Ethics and Practices*. You may view this and other AAPOR reports and documents on the Internet at http://www.aapor.org.

Response Rate (RR3) = **0.112**
Cooperation Rate (COOP4) = **0.230**
Refusal Rate (REF2) = **0.375**

Table 6: Final Disposition and Outcome rates

AAPOR Final Disposition Code	Category	Records
1.10	Complete	856
1.20	Partial	104
2.11	Refusal	3,210
2.25	Callback	45
3.12	Always busy	884
3.13	No answer	1,035
3.14	Telephone answering device	4,465
3.16	Phone line problem	8
3.20	Number changed	25
3.90	Language barrier	145
4.20	Fax/data line	148
4.30	Non-working/disconnected number	1,221
4.50	Business, government office, other organization	530
4.70	No eligible respondent	268
Total		**12,944**

Over forty-five thousand (45,304) individual call attempts were made to 12,944 unique phone numbers in order to obtain 857 completions, with the average completed interview taking just over 16 minutes.